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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/038,642	01/04/2002	Thomas J. Conway	56995US002	9185
32692	7590	05/03/2005	EXAMINER	
3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427 ST. PAUL, MN 55133-3427			NORDMEYER, PATRICIA L	
			ART UNIT	PAPER NUMBER

1772

DATE MAILED: 05/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/038,642

Applicant(s)

CONWAY ET AL.

Examiner

Patricia L. Nordmeyer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 and 46-51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 and 46-51 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 18, 2005 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1 – 22 and 46 – 51 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Independent claims 1, 18 and 46 contain the newly added term “birefringent”, which is not supported by the specification. There is no mention of the multi-layer optical film being a “birefringent” film.

Claims 2 – 17, 19 – 22 and 47 – 51 are also rejected under 35 U.S.C. 112 first paragraph due to their dependency on the above mentioned claims.

Clarification/correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 – 11, 46 – 49 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gajewski et al. in view of McGurran et al. (USPN 6,811,867).

Gajewski et al. discloses a laminate (Column 1, lines 13 – 14) comprising a first and second bonding sheets (Column 8, lines 3 – 4) made from polyvinyl butyral that have a major surface surfaces and peripheral edges (Column 7, lines 1 – 2 and Figure 2, # 12 and 24), wherein both the first and second bonding layers are suitable for bonding to glazing components (Column 5, lines 21 – 24 and lines 29 – 32). A transparent optical sheet comprising an extruded multi-layer sheet of semi-rigid material having a major surface and a peripheral edge (Column 7, lines 15 – 16 and Figure 4, #26) such as polyester (Column 8, lines 26 – 27) is located in between the laminating sheets and glazing components (Column 5, lines 21 – 32) and is bonded with the bonding sheets by laying the edge of the optical sheet within the peripheral edge of the bonding sheet (Figure 2). As seen in Figure 4, the major surface of the optical sheet and the major surface of the bonding materials are positioned together. The optical film is of size so that is positioned within the peripheral edge of the glazing components (Figures 1 and 2, Column 6, 8,

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lines 35 – 37). While one of the major surfaces of the bonding sheets are in contact with the optical sheet, the other major surface of the bonding sheets are in contact with the major surfaces of the glazing components (Figure 2, #12, 14, 24 and 22). The optical film is completely within the peripheral edges of the glazing components (Figure 2, #12, 20 and 22). The layers in the laminate are fully bonded together so that no voids adjacent to the peripheral edge of the optical sheet (Figure 5). However, Gajewski et al. fail to disclose a non-metallic birefringement multi-layer optical film and wherein the optical film is a film from the group consisting of infrared reflecting films, polarized films, non-polarized films, multi-layer films, colored films, tinted films and decorative films.

McGurran et al. teach a non-metallic birefringement multi-layer optical film (Column 3, lines 24 – 35) made from a variety of polymer materials (Column 2, lines 7 – 23) wherein the optical film has many applications including infrared reflecting films, polarized films, non-polarized films, multi-layer films, tinted films and decorative films (Column 7, lines 29 – 37) for the purpose of having an optical body exhibits a transmission of light within the visible spectrum of about 10 to about 90 percent and exhibits less than or equal to about five percent internal haze (Column 1, lines 60 – 64) in automotive glass applications (Column 2, lines 41 – 43).

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided the non-metallic birefringement multi-layer optical film that has many applications that include infrared reflecting films, polarized films, non-polarized films, multi-layer films, tinted films and decorative films in Gajewski et al. in order to have an

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optical body exhibits a transmission of light within the visible spectrum of about 10 to about 90 percent and exhibits less than or equal to about five percent internal haze in automotive glass applications.

6. Claims 12 – 22 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gajewski et al. in view of McGurran et al. (USPN 6,811,867) as applied to claims 1 – 11, 46 – 49 and 51 above, and further in view of Frost et al.

Gajewski et al. discloses a laminate comprising a first and second bonding sheets made from polyvinyl butyral that have a major surface surfaces and peripheral edges, wherein both the first and second bonding layers are suitable for bonding to glazing components. A transparent optical sheet comprising an extruded multi-layer sheet of semi-rigid material having a major surface and a peripheral edge such as polyester is located in between the laminating sheets and glazing components and is bonded with the bonding sheets by laying the edge of the optical sheet within the peripheral edge of the bonding sheet. The major surface of the optical sheet and the major surface of the bonding materials are positioned together. The optical film is of size so that is positioned within the peripheral edge of the glazing components. While one of the major surfaces of the bonding sheets are in contact with the optical sheet, the other major surface of the bonding sheets are in contact with the major surfaces of the glazing components. The optical film is completely within the peripheral edges of the glazing components. The layers in the laminate are fully bonded together so that no voids adjacent to the peripheral edge of the optical sheet. However, Gajewski et al. fails to disclose the multi-layer optical film having a peripheral

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strip having a width and an inner peripheral edge, said peripheral strip being disposed beyond the peripheral edge of said optical sheet and the inner peripheral edge of said strip and peripheral edge of said optical sheet defining a slit therebetween, the slit going through the optical sheet and one said first or second bonding sheets, a hole formed through the optical film, the optical film peripheral edge extending beyond the peripheral edge of at least one glazing component and the optical film peripheral edge extending beyond the peripheral edge of at least one glazing component.

Frost et al. teach an intermediate film, optical sheet, in between two glazing components that is cut in a variety of sizes including the same size as the glazing components, smaller than the components or larger than the components, extends beyond the edges of the glazing components, (Column 2, lines 6 – 9) or forming an incision or slit into the intermediate film, optical sheet, (Column 2, lines 10 – 14 and Figure 3, #8) for the purpose of removing excess material from the intermediate film to ensure that the film is completely encased by the outer substrates, controlling corrosive risks and for inserting wires and other electronic equipment in between the layers of material.

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided the slits and the different sizes of optical sheets in Gajewski et al. in order to remove excess material from the intermediate film to ensure that the film is completely encased by the outer substrates, controlling corrosive risks and for inserting wires and other electronic equipment in between the layers of material.

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Response to Arguments

7. Applicant's arguments with respect to claims 1 – 22 and 46 - 51 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia L. Nordmeyer whose telephone number is (571) 272-1496. The examiner can normally be reached on Mon.-Thurs. from 7:00-4:30 & alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Y. Pyon can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patricia L. Nordmeyer
Examiner
Art Unit 1772

pln
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Harold Pyon
HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772

4/29/05